

AN EXAMINATION OF FACTORS RELATE TO THE COGNITIVE AND
AFFECTIVE EMPATHY LEVELS OF ADJUDICATED YOUTH

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With the advent of increased juvenile delinquency in our nation, the need for prevention and rehabilitation is paramount. Juvenile delinquent acts are becoming more serious and violent with offenders perpetrating at younger ages. Analysis suggests an increase in juvenile crime in the near future (Stone, 2000).

Pinpointing the cause of delinquency is an arduous task because of the many contributing factors (e.g., impulsivity, aggression, low intellect, poor family attachment, drug, and alcohol abuse). By changing the emotional deficits found in beginning delinquency, the likelihood of developing delinquent behavior may be impeded. Research indicates that adolescents who commit crimes are lacking in empathy (e.g., Aleksic, 1975; Cohen & Strayer, 1996; Ellis, 1982; Gibbs, 1987; Marcus & Gray, 1998), thus, promoting empathy may be an avenue for prevention and rehabilitation.

This study examined the levels of empathy of adjudicated youth in four juvenile correctional facilities in Texas. Using the Interpersonal Reactivity Index (IRI), empathy levels of 170 youth were examined. Youth in the study demonstrated low levels of empathy. The study found that empathy levels of adjudicated youth were differentiated by incarcerating facility, IQ, type of offense, disability status, and phase level of a re-

socialization training program. Age was not found to be a significant factor for differentiating empathy levels.

Youth demonstrated similar empathy levels at three of the four incarcerating facilities. However, empathy scores were still below average. IQ ranges were differentiated by the IRI, and found to be lower than normed scores. Type of committing offense was discriminated and found to indicate low empathy levels. Youth without an identified disability scored lower than subjects with emotional/behavioral disorders (E/BD) and youth with learning disabilities (LD). This may reflect the pattern of underidentification of juveniles in correctional facilities (Nelson, Rutherford, & Wolford, 1987). Phases of Re-socialization is an instructional therapeutic program with an empathy component used at the Texas Youth Commission correctional facilities. Data from the study indicated that youth at higher phase levels demonstrated increased empathy.

Much of the data are inconsistent, thus establishing the need for further research. A deeper understanding of the impact of each factor (e.g., incarcerating facility, age, IQ, type of offense, disability status, phase) may be accomplished by further research. However, data from this study is consistent with previous research (e.g., Daberman, 1999; Ellis, 1982; Gibbs, 1987; Lee & Prentice, 1988), indicating a link between juvenile delinquents and empathic deficits.

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CHAPTER I

INTRODUCTION TO THE STUDY

Background

According to the Office for Juvenile Justice and Delinquency Prevention [OJJDP] (2000), juvenile delinquent acts became more serious and violent during the late 1980's and the early 1990's. Additionally, juvenile arrests for violent crimes have increased 67% since 1986. The rise of juvenile crime reflects a dramatic increase in female offenders, youth entering the juvenile court system at younger ages, and escalating gang participation. Analysis of the future of juvenile crime suggests a 30% increase by the year 2010 (OJJDP, 2000). Trends in the United States reflect the increase in juvenile delinquency: economy shift, deterioration of the extended family, increase of single parenting, access to firearms and weapons, and the prevalence of gangs (Stone, 2000). Future welfare reform may result in increased childhood poverty which is a correlate of increased risk for victimization. Research cites that offenders are often previous victims (e.g., Soriano, Soriano, & Jimenez, 1994; Tolan & Guerra, 1994), thus continuing the cycle of violence.

As juvenile delinquency rises in our nation, the need for prevention and rehabilitation is paramount. Pinpointing the cause of delinquency is an arduous task because of the many contributing factors (e.g., impulsivity, aggression, low intellect, poor family attachment, drug, alcohol abuse). By changing the emotional deficits found in beginning delinquency, the likelihood of developing delinquent behavior may be

impeded. Research indicates that adolescents who commit crimes are lacking in empathy (Aleksic, 1975; Cohen & Strayer, 1996; Ellis, 1982; Gibbs, 1987; Marcus & Gray, 1998), thus, promoting empathy may be an avenue for prevention and rehabilitation. Empathy is necessary for developing prosocial relationships (Bryant, 1982; Rice, 1992; Schonert-Reichl, 1993), yet adjudicated youth appear to have deficits in this critical area. It has been postulated that the lack of empathy may be a result of poor parenting (Loeber & Dishion, 1983), absence of close friendships, and low sociometric status (Marcus, 1996; Patterson, DeBaryshe, & Ramsey, 1989). According to Gibbs (1987), juvenile delinquents have not experienced appropriate and positive role-taking opportunities, a necessary precursor for developing empathy.

Empathy is defined from cognitive and affective perspectives resulting in a *mélange* of theoretical and operational definitions (Cohen & Strayer, 1996; Ellis, 1982; Gibbs, 1987; Lee, 1983). The cognitive perspective holds that persons have a perception or understanding of how another person feels (Briggs, 1975; Cohen & Strayer, 1996; Crider, Goethals, Kavanaugh, & Solomon, 1986; Ellis, 1982), while the affective theory assumes that vicarious or actual experiencing of another's feelings is the foundation of empathy (Chlopan, McCain, Carbonell, & Hagen, 1985; Ellis, 1982). Integrative approaches may be viewed as the joining of cognitive and affective perspectives, with the interaction of each element resulting in genuine empathic responses (Gribble & Oliver, 1973). All perspectives appear to find the need for positive role-taking opportunities (Gibbs, 1987; Hoffman, 1998; Kohlberg, 1969; Rice, 1992). Poor social relationships do not give foundation for role-taking opportunities resulting in the lack of empathy.

Children and adolescents require positive, close relationships with parents and friends for competent development (Asher, 1983; Berndt, 1982; Eisenberg & Miller, 1987; Hoffman, 1998; Rice, 1992). Parental involvement and care significantly impact healthy adolescent growth (Pedersen, 1994; Rice, 1992). Limited supervision and inconsistent management of children and youth is a strong predictor of delinquent behavior (Loeber & Dishion, 1983; Patterson et al., 1989; Smith & Krohn, 1995), as is excessively rigid discipline techniques (Marcus & Gray, 1998; Loeber & Dishion, 1983).

As with parental relationships, intimate friendships among youth cultivates prosocial behavior and is important to healthy development. Adjudicated youth do not experience the same quality of friendship as non-delinquent adolescents (Marcus, 1996). Often, delinquent youth lack empathy towards their friends which leads to difficulty in developing, maintaining, and repairing friendships. In addition, delinquent youths frequently experience negative peer contacts (Beebe & Mueller, 1993). Many of these youth select friends based on values of hostility and antisocial behavior, which they have internalized (Rice, 1992). Norms of aggressive, deviant behavior are established and often revered among these adolescents (Olweus, 1977).

Although there appears to be a link between juvenile delinquency and empathic deficiency (Daderman, 1999; Ellis, 1982; Gibbs, 1987; Lee & Prentice, 1988), definitive research examining the possibility of empathy development to impede delinquent behavior has been given limited attention. Further research is necessary to examine the relationship between delinquent behavior and empathic deficits. Promoting and teaching empathy may be an essential component to effective prevention and rehabilitation

programs for adjudicated youth and children at-risk for delinquency.

Purpose

Adjudicated youth are inept in expressing appropriate empathic responses (Daderman, 1999; Ellis, 1982; Gibbs, 1987; Lee & Prentice, 1988). The purpose of this study was to examine the empathy levels of youth placed at four different correctional facilities. The study attempted to determine if empathy levels among adjudicated youth can be differentiated by (a) age, (b) intelligence quotient (IQ), (c) type of offense, and (d) disability status. This study also investigated the impact of an empathy component in a re-socialization program used at the four juvenile correctional facilities.

Significance

Studying the relationship between adjudicated youth and empathy has significance at the family, practitioner, and policy-making levels. Providing children and youth with the appropriate skills to become successful citizens is fundamental to parents. Families lacking the skills necessary to manage and teach their children appropriate behavior put their children at-risk for contact with the juvenile court system. Given the knowledge of the importance of empathy in raising healthy children, families may be able to impede the likelihood of delinquency in the household.

At the practitioner level, teachers, counselors, law enforcement, and professionals in the correctional system may utilize information from this study to develop effective techniques for instilling empathy in adjudicated youth. Information about the association of different factors impacting levels of empathy may be used for preventative measures. Personnel working with adjudicated youth could teach empathy as an intervention to

impede further delinquent behavior. This study also provides validation data on the effectiveness of an empathy component used in re-socialization training in Texas Youth Commission (TYC) facilities.

Limitations

Several limitations are apparent in this study. First, the subjects were drawn from four facilities in Texas and may not be representative to the entire population of adjudicated youth. Participants were all male, limiting the ability to generalize to the female population. The investigator assumed that the subjects were honest in self-reported measures. Researchers have found that self-reported data on adjudicated youth meet valid and reliable criteria (Hindelang, Hirschi, & Weis, 1979).

Definition of Terms

1. Adjudicated: Having had action through a court of law due to indictment or information filed with a trial court (Nelson, Rutherford, & Wolford, 1987).
2. Arson: An intentional/attempted harm or destruction through use of fire or explosives of property without permission from the owner, or of one's own property or other's property with/without the intention to defraud (Nelson et al., 1987).
3. Assault: The illegal, intentional perpetration or attempted perpetration of injury on another individual (Nelson et al., 1987).
4. Burglary: The illegal entry into a vehicle, home, business or industry workplace, with/without force with intent to commit a larceny or felony (Nelson et al., 1987).
5. Capital offense: An offense punishable by death (Texas Youth Commission, 2000).

6. Delinquent: A legal term indicating that a child/adolescent has violated the law.

Children and youth can commit “status offenses” which are illegal only because of the offenders age (e.g., truancy, consuming alcohol). “Index crimes” are illegal whether committed by a child, youth, or adult such as robbery and murder (Nelson et al., 1987).

7. Juvenile: a youth at or below the oldest age for which a juvenile court has first authority or jurisdiction over an individual for violating the law (OJJDP, 2000).

8. Robbery: Illegal acquiring or attempting to acquire, through force or threat of force, property in the immediate possession of another person (Nelson et al., 1987).

CHAPTER II

REVIEW OF LITERATURE

Introduction

In examining the previous literature regarding adjudicated youth and empathy, searches were conducted through Psychological Abstracts, National Criminal Justice Reference Service, Educational Resources Information Center (ERIC), and Dissertation Abstracts International; literature from 1900 to present was reviewed. Keywords used in the data bases were “empathy,” “adjudicated youth and empathy,” “juvenile delinquency and empathy,” “children and empathy,” and “adolescents and empathy.” Literature addressing empathy and this population is limited; however, reoccurring themes became evident.

“Empathy is conceived as a holistic process of the human organism which has a positive influence on the quality of life” (Kalliopuska, 1992, p. 1119). As adjudicated youth often lack empathy (Daderman, 1999; Ellis, 1982; Gibbs, 1987; Lee & Prentice, 1988), an already troubled life becomes more difficult. Conceivably, because of their poor response to empathy, many of these youth can behave callously and demonstrate acts of violence perpetrated on others. This review of literature addresses many research areas associated with empathy and adjudicated youth by examining (a) the definition of empathy, (b) the correlation of empathy and prosocial relationships, (c) the levels of empathy in adjudicated youth, and (d) the possibility of effectively teaching empathy. If empathy can be successfully taught, perhaps the quality of life for these adolescents can

greatly improve.

Empathy Defined

Much discussion has focused around the definition of empathy (Cohen & Strayer, 1996; Ellis, 1982; Gibbs, 1987), due to the variety of existing operational and theoretical definitions (Iannotti, 1975). *Cognitive* and *affective* models are often debated as to which is the true foundation for the meaning of empathy. Theories based on the cognitive framework of empathy are closely associated with Lawrence Kohlberg (Gibbs, 1987; Morgan, Eagle, Esser, & Roth, 1993; Rice, 1992), whereas, the affective theory of empathy is generally identified with Martin Hoffman (Gibbs, 1987). The cognitive theory of empathy holds that persons have a perception and comprehension of how other individuals feel (Briggs, 1975; Cohen & Strayer, 1996; Crider et al., 1986; Ellis, 1982), while the affective theory assumes that vicarious or actual experiencing of another's feelings is the foundation of empathy (Chlopan et al., 1985; Ellis, 1982). In more recent years theorists have attempted to define empathy as the integration of the cognitive and affective processes. All three perspectives (i.e., cognitive, affective, and the combination of the two) will be discussed.

Cognitive perspectives of empathy

From the cognitive perspective, Wolfgang Kohler (1929), a Gestalt psychologist defined empathy as one's understanding of another's emotion. Mead (1934) described empathy as the ability to take on the role of another individual in order to understand the appropriate social response. Although feeling is evident, thinking is the primary component of empathy.

Based on the works of Mead, Carl Rogers focused on the role-taking aspect of empathy development. According to Rogers (1959), empathy is “to perceive the internal frame of reference of another with accuracy and with the emotional components and meaning which pertain thereto as if one were the person, but without ever losing the ‘as if’ condition” (p. 210-211). In this definition, role-taking is used as a vehicle to understand and reflect on the emotional state of the other individual.

Kohlberg based his works on the studies of moral development in children by Jean Piaget. As Piaget’s research only focused on children under 12 years of age, Kohlberg used Piagetian methods and materials to study the moral development of adolescents (Rice, 1992). According to Kohlberg (1969), persons develop moral reasoning through gradual and continual processes. Based on his studies, three levels of moral development were identified: preconventional, conventional, and postconventional. The first level, preconventional, is the foundation of moral judgement and is depicted by egocentrism. Next, the conventional level is characterized as sociocentric. In this level, individuals make moral decisions based on group or societal ideals. Last, the postconventional level requires persons to make moral judgements based on universal truths and human rights (Kohlberg, 1981). Arbuthnot and Gordon (1988) state that most studies find a disproportionate number of juvenile delinquents in the preconventional stage, while non-delinquents are generally at the higher stages. Furthermore, the few delinquents measuring in the higher stages of moral development rarely perpetrated victim-related crimes.

Corresponding to the works of Kohlberg, Selman (1975) created a cognitive

developmental age related design of empathic responses utilizing role-taking. According to this researcher, role-taking is a prerequisite to empathy development. Empathy continues to be cultivated throughout a person's life depending on the developmental level of the social perspective taking and an understanding of the essence of others. Children at the lowest level, display egocentric social perspective taking, by responding empathically only to physical demonstrations of feelings (e.g., crying, physical pain). At higher developmental levels, children are able to empathize with psychological emotions.

In short, the cognitive perspective of empathy holds that persons have an understanding of how others feel. Observers are required to think in order to exhibit an empathic response. Role-taking is an essential component, allowing observers to think how they would feel if in the other person's position.

Affective perspective of empathy

Theodore Lipps (1906), a German psychologist identified the word "Einfühlung" referring to the idea of empathy. Einfühlung is a process in which a bystander integrates the emotions and posture of another individual. Freud (1921) described empathy as a result of the mechanism of identification of the attitudes towards the mental life of another. Following this paradigm, Fenichel (1954) suggested that empathy involves identifying with another, and understanding one's own feelings through identifying with another's emotional state.

In the 1960's, empathy was viewed as a conditioned emotional reaction due to vicarious judgment (Berger, 1962). Stotland, Sherman, and Shaver (1971) went further with the definition by suggesting that an empathic response may depend on an observer's

ability to predict another's emotional reaction. Thus, empathy is the vicarious emotional response to what is perceived as another's emotional state. Berger (1962) proposed that when an observer reacts to stimuli other than the emotional state of another, "pseudoempathy" has occurred. For example, hearing an individual scream elicits a sense of fear due to a conditioned reaction to fear, not the emotional state of the screamer. Observing another might evoke an anticipatory stimulus as well. A child will fear being spanked when he sees his friend who participated in the mischief being spanked. The child is fearful due to the anticipation of being spanked, not because of the cries of his friend.

Hoffman (1975) has theorized that empathy requires individuals to have sensitivity to the affective events in another's life. In developing morals, individuals must wrestle with egoistic desires and behaving morally. Learning to have empathy occurs when faced with moral dilemmas come opportunities to see the consequences of the suffering of others after exhibiting inappropriate acts. Hoffman (1998) has stated that true empathy is feeling for another's condition rather than your own.

Integrative perspective of empathy

Hoffman (1998) once associated with the affective perspective has, in more recent years, adjusted his view of empathy. Hoffman (1998) recognized the interaction between cognitive and affective processes in empathy. Through the pioneering works of Piaget (1932) and Kohlberg (1969; 1981), Hoffman suggests a developmental sequence of stages for empathy growth. Children develop empathy through role-taking and awareness of personal identity. Cognitively and affectively, children move from primitive empathic

responses to sympathy, altruism, and feelings of guilt.

Based on historical works of empathy, the integrative perspective of empathy appears to be the most logical. Recognizing both fundamental aspects of empathy provide a better understanding of this psychological construct. The integrative approach consists of two elements: (a) a cognitive function which maintains the awareness of the separateness and differentness of another person, and (b) an affective reaction providing the substance and the sense of vicarious reality of the experience of another person. Thus, “these two components interact with each other where cognitive understanding of another’s feelings facilitates affective experiencing of that state, and vice versa” (Lee, 1983, p. 20).

For the purpose of this literature review, empathy is defined as a synthesis of both cognitive and affective (Bos & Vaughn, 1994, Cohen & Strayer, 1996, Gibbs, 1987); meaning the ability to identify and understand affective signals, and to exhibit an emotional response to another individual’s affective condition. Both Kohlberg (1969, 1988) and Hoffman (1975) attribute inadequate role-taking opportunities as a precursor to having a lack of empathy. Thus, poor social relationships do not provide for moral role-taking opportunities. Research is indicating that adjudicated youth do not experience adequate prosocial relations with parents (Bos & Vaughn, 1994; Marcus & Gray, 1998; Matlack, McGreevey, Rouse, Flatter, & Marcus, 1994) or friends (Asher, 1983; Berndt, 1982; Bos & Vaughn, 1994; Marcus, 1996) as compared to non-delinquent children and youth.

Empathy and Prosocial Relationships

Having positive, close relationships with parents and friends are extremely important to the development of children and adolescents (Asher, 1983; Berndt, 1982; Eisenberg & Miller, 1987; Hoffman, 1998; Rice, 1992). Research cites the importance of empathy in developing positive social relationships (e.g., Bryant, 1982; Eisenberg & Miller, 1987; Rice, 1992; Schonert-Reichl, 1993). However, many adolescents experience difficulty in forming prosocial relationships and developing empathy. Schonert-Reichl (1993) studied 39 adolescent males identified as having emotional/behavioral disorders (E/BD) and 39 age-equivalent peers without E/BD on empathy levels. Results found that the adolescents with E/BD had lower empathy levels, participated in fewer extracurricular activities, and had poorer quality social relationships in comparison to their peers. This is a significant study because many adolescents with E/BD have been adjudicated (Bateman, 1996; Doren, Bullis, & Benz, 1996; Wagner, D'Amico, Marder, Newman, & Blackorby, 1992). It appears that a disproportionate number of individuals with E/BD are likely to be incarcerated. A longitudinal study by Wagner and colleagues (1992) revealed that 37% of individuals with E/BD have been arrested within two years after high school. Doren et al. (1996) studied the arrest status of 422 adolescents with disabilities from Oregon and Nevada in their last year of high school, and their first and second years after high school. As noted in other studies (Bateman, 1996; Wagner et al., 1992), findings indicated that participants with E/BD were the most likely of all the disability groups to be arrested.

Research cites a correlation between adolescents with E/BD and incarceration (Bateman, 1996; Doren et al., 1996; Wagner et al., 1992). Links between poor parent and child relationships and juvenile delinquents has been cited (Loeber & Dishion, 1983;

Marcus & Gray, 1998; Patterson et al., 1989), as well as a lack of close friendships and poor sociometric status among delinquent youth (Marcus, 1996; Patterson et al., 1989). It appears that adjudicated youth may have had little opportunity to experience appropriate and positive role-taking in their social relationships.

Parents and adjudicated youth

Rice (1992) emphasizes the need for strong bonds between parents and adolescents. He identified five family factors that are closely associated to moral development which in turn, contributes to empathy development. First, children and youth require high degrees of warmth, acceptance, and trust from their parents. Next, frequent and intensive interaction and communication between parent and child is fundamental. Children and youth also need positive, consistent discipline from their parents. Harsh punishment or overly permissive parenting may result in antisocial behaviors. Fourth, parents should be moral role models; adolescents who identify with positive adult role models are less likely to become involved in delinquent behaviors. Finally, independence opportunities provided by the parents allow adolescents to explore social behaviors in an appropriate manner. Studies reveal that parents of identified delinquents or antisocial adolescents often violate some or all of these five fundamental practices to good parenting (Loeber & Dishion, 1983; Marcus & Gray, 1998; Patterson et al., 1989). In a review of literature, Loeber and Dishion (1983) concluded that poor family management, inadequate parenting techniques, and the criminality of parents are strong predictors of juvenile delinquency. Clearly, the behavior of children and adolescents is significantly affected by their relationships with their parents.

Adjudicated youth typically have poor relationships with their parents (Loeber & Dishion, 1983; Marcus & Gray, 1998; Matlack et al., 1994; Tolan, 1988). Marcus and Betzer (1996) studied 163 sixth, seventh, and eighth graders, and found that poor attachment to parents was highly correlated to antisocial behavior. Their study indicated that attachments to fathers is the strongest predictor of antisocial behaviors. Poor fathering is not the only parental component leading to delinquency. Mothers of delinquent children have been found to have lower moral reasoning levels when compared to mothers of nondelinquent children (Hudgins & Prentice, 1973). Researchers have postulated that because parents are the first relationships and remain the longest relationships, children and youth need positive, strong attachments (Marcus & Betzer, 1996). Quality relationships with parents will promote appropriate behavioral norms and social skills training. Thus, the lack of attachment, inadequate social instruction, and poor role modeling by parents are covariates for antisocial behavior, which later could be exhibited in delinquent acts (Patterson et al., 1989).

Marcus and Gray (1998) studied 101 adjudicated African American males committed to a maximum security detention center. The subjects were between 14 and 18 years old, and were currently incarcerated for the third or more times. All but one youth reported witnessing violent acts (e.g., robberies, beatings, murder). In the Marcus and Gray study, adjudicated youths predominantly (73%) lived with their mothers only, with a mere 3% having both parents in the home. The remaining participants (24%) lived with a female relative before incarceration. Thus, the head of household was primarily a poorly educated, unemployed woman. Additionally, most of these incarcerated youths tested

between two to four grade levels below their peers and were recommended for special education services.

The researchers measured the participants' perceptions of rejection and acceptance by his parents, attachments to adults, and empathy levels using three different self-reporting scales. Participants were divided into two groups: violent or non-violent delinquents. Youth categorized as violent had criminal records revealing a history of murder, robbery, or assault. Non-violent participants were convicted of crimes such as shoplifting, burglary, or car theft (Marcus & Gray, 1998).

The study revealed that violent delinquents perceived greater amounts of rejection by their parents and had increased levels of anxiety about being abandoned or unloved when compared to non-violent delinquents. Furthermore, violent delinquents were generally older, had more arrests, and lower reading scores. Although violent delinquents scored lower on the Index of Empathy for Children and Adolescents, the difference was not significant. However, when compared to other studies using the same measurement scale (Cohen & Strayer, 1996), both the violent and non-violent participants scored much lower than established norms. Marcus and Gray postulate that the lack of significant differences in empathy levels may be a result of using a heterogeneous group. The researchers noted that previous studies indicate empathy as a key component of violent behavior.

Presumably, the teaching of parents significantly influence the feelings and emotions of adolescents. A study by Morin & Welsh (1996) investigating suburban adolescents and urban adjudicated adolescents dealing with grief over deaths of loved ones support

this theory. In attempting to understand death and grief, adolescents report parental emotional support, communication, and empathy as important. Adolescents from suburban areas had no experience relating death to violence, while 25% of adjudicated adolescence perceived death as violent. Suburban youth reported suffering as the most bothersome aspect of death, while adjudicated youth reported their own sense of loss of a loved one most troubling. It appears that suburban adolescents consider the feelings of others, while adjudicated adolescents considered their own feelings during a loss. Interestingly, suburban youth reported that reminders that time would help ease their grief as the most successful coping strategy, while adjudicated youth viewed reminders to go to school and complete an education as their most helpful coping method. The researchers hypothesized that this may indicate that school and education is an escape and way out of the violence in their lives.

Friends and adjudicated youth

During adolescence, the need to develop friendships is critical (Buhrmester, 1990). Friendships give adolescents a vehicle to explore their personality, social skills, and social behaviors. Friendship selection is extremely important in adolescence because friends strongly influence dress, appearance, and behavior of youth. Friends create a sense of identity for adolescents (Rice, 1992). Friendships during adolescence generally focus on similarities (Berndt, 1982; Olweus, 1977; Rice, 1992); similar interests and traits make it easier to develop intimate relationships. Given the importance of friendships during adolescence, empathy is a fundamental aspect of developing, maintaining, and repairing relationships among friends. Adolescents with an identified

best friend are more likely to display altruistic behaviors to others, including strangers (Berndt, 1982). It appears that intimate friendships among adolescents promote prosocial behaviors; however, friends may also influence deviant behaviors.

Olweus (1977) studied overly aggressive adolescent males bullying younger, weaker males. Measures indicated that the aggressors were considered more popular than their victims. The researcher concluded that standards of group behavior vary among different groups of adolescents. Thus, popularity is not a set standard, but relegated by group conformity. Therefore, malicious, aggressive behavior that is not accepted as a societal norm may be required for membership in gangs. Delinquent adolescents may value hostile, uncooperative, antisocial behavior for association within their group of friends (Rice, 1992).

After reviewing literature comparing delinquent and nondelinquent friendships, Marcus (1996) concluded great variability between the quality of friendships. Delinquents lack empathy toward their friends and have decreased stability and reparative skills in their friendships. Literature indicates that not just adjudicated youth, but adolescents with conduct disorders (Panella & Henggeler, 1986), behavioral disorders (Schonert-Reichl, 1993) and those with poor acceptance from peers (Asher, 1983; Parker & Asher, 1987) all experience difficulty in developing and maintaining quality friendships. Furthermore, conduct disorders (Panella & Henggeler, 1986), behavioral disorders (Bateman, 1996; Doren et al., 1996; Wagner et al., 1992), and peer rejection (Parker & Asher, 1987) have been found to lead to delinquency.

While empathy is considered a vital element for prosocial relationships (Marcus,

1996), adjudicated youth lack the attachment to friends that promotes empathy. Because role-taking opportunities afford adolescents the chance to put themselves in another person's shoes, it is critical to friendships (Gibbs, 1987). Marcus (1996) has theorized that because adjudicated youth often lack role-taking opportunities, they are retarded in the ability to have empathy towards their friends.

Empathy and Adjudicated Youth

Prosocial relationships appear to promote empathy. Although research is limited, evidence suggests that adjudicated youth experience difficulty in establishing and maintaining prosocial relationships due to low levels of empathy (Ellis, 1982; Gibbs, 1987; Lee & Prentice, 1988). In fact, Gibbs (1987) has postulated that when juvenile delinquents do exhibit empathy, it is random and superficial. These youth are egocentric which squelches empathetic feelings for others.

Morgan and colleagues (1993) studied the moral reasoning of 38 male, juvenile delinquents placed at a boys' ranch. Schools had identified the youth as having E/BD or a learning disability, with a few having mild mental retardation. The youth were read stories on altruism and asked to answer the moral dilemma at the end of each story. Results indicated that the youth were deficit in their moral reasoning levels compared to peers their age.

Ellis (1982) found similar results when studying 331 juvenile delinquents and 64 nondelinquents. The delinquents were divided into three groups: psychopathic, neurotic, and subcultural. Ellis defined the psychopathic delinquents as manipulative, insubordinate, amoral, guiltless, impulsive, egocentric, lacking loyalty, and distrustful of

those in authority. Neurotic delinquents were identified as impulsive, aggressive, depressed, hypersensitive, and experiencing feelings of guilt for misbehavior. These youth expressed feeling inferior and lacked appropriate interpersonal relations.

Subcultural delinquents were a reflection of the accepted values and behaviors of lower-class, disadvantaged subcultures. These youth were loyal to peers in their subculture and appeared satisfied with themselves. Their only motivation to behave more appropriately was to avoid legal problems.

All groups were given Hogan's Empathy Test (HET, 1969), a 64-item questionnaire measuring empathy based on social perception and interpersonal skills. When comparing all three delinquent groups to the nondelinquent participants, delinquents scored significantly lower in empathy. Neurotic delinquents scored the lowest on empathy, followed by psychopathic delinquents. Both groups varied significantly from each other as well as from the subcultural delinquents and the nondelinquents. However, the subcultural delinquents and the nondelinquents did not vary significantly in their scores, with nondelinquents scoring higher. Ellis (1982) concluded that subcultural delinquents were adjusted to their own environment which resulted in higher levels of empathy. Thus, the more maladjusted a youth is, the lower his empathy.

Although many researchers have cited low levels of empathy in adjudicated youth (e.g., Aleksic, 1975; Ellis, 1982; Gibbs, 1987), not all studies have found this to be the fact. Lee and Prentice (1988) studied the empathy levels of 36 adjudicated youths detained in a juvenile correctional facility, and 18 nondelinquent males attending the public high school in an urban area noted for high delinquency. School records and

participant interviews established that the 18 control subjects had no history of delinquency. As in the study by Ellis (1982), the delinquents were divided into the three categories of psychopathic, neurotic, and subcultural. Empathy was measured by the Davis Interpersonal Reactivity Index (IRI, 1983), which assessed empathic concern and personal distress. The Mehrabian and Epstein Questionnaire Measure of Emotional Empathy (QMEE, 1972), a 33-item self-report questionnaire, was used to measure the subjects' affective range of empathy.

Results of the IRI found that the nondelinquents had lower levels of empathy compared to the delinquent groups combined or separate. According to the QMEE, the psychopaths and subcultural delinquents have the lowest levels of empathy compared to the nondelinquents; however, the neurotics were found to have the highest. Overall, no significant differences were found between the delinquents and the control group. Other researchers have noted no significant differences in comparing the empathy of delinquents to nondelinquent youths (Kendall, Deardorff, & Finch, 1977). Why is there such inconsistency in the research findings?

Several explanations have been offered in response to the inconsistencies. First, the validity of the instruments used to measure empathy has been questioned (Chlopan et al., 1985; Lee & Prentice, 1988). How accurately can an instrument assess empathy while controlling for other constructs? One must also consider problems inherent to self-reported scales (Cohen & Strayer, 1996). An additional reason for studying differences may be attributed to the developmental process related to empathy. Because adolescence is a time of instability, differing ranges in empathy could be a result (Lee & Prentice,

1988). Finally, Cohen & Strayer (1996) suggest that heterogeneity among the target populations in the studies may also give reason for differences in the findings.

From the limited research available, the emphasis has been on empathy and adjudicated youth, not on specific factors that may differentiate between empathy levels. Research sorting adjudicated youth into categories has addressed psychological dimensions such as, psychopathic, neurotic, subcultural delinquency (Ellis, 1982; Lee, 1983; Lee & Prentice, 1988). Specifically examining the age, intelligence, type of offense, and disability label of adjudicated youth in relation to empathy levels is needed. Research has indicated that the IQ of an adjudicated youth is related to moral reasoning (Arbuthnot & Gordon, 1988), with individuals with higher IQs showing increased levels of moral development. Violent juvenile delinquents are typically older and less attached to family than nonviolent juvenile delinquents (Marcus & Gray, 1998). A study by Schonert-Reichel (1993) found adolescents with E/BD reported lower empathy levels than their non-disabled peers. Clearly, age, intelligence, type of offense, and disability effect empathy levels, yet current literature does not consider how the factors impact empathy in relation to juvenile delinquency.

Teaching Empathy

Although many theorists adhere to the philosophy that empathy is learned through developmental stages (e.g., Hoffman, 1998; Kohlberg, 1969, 1981; Rice, 1992), it has been hypothesized that biological factors do play a role (Damon, 1988; Gibbs, 1987). Genes, hormones, and prenatal care impact the biology of individuals (Poston, Norton, & Morales, 1994). The age old question of nature vs. nurture rears its head in determining

the cause of empathy. Are some children born with a higher propensity for empathy or does the environment dictate empathy levels? Investigators have attempted to answer this question through twin studies, infant research, and brain research.

Twin studies find that identical twins experience similar levels of empathy when compared to dizygotic twins (Rushton, Fulker, Neale, Nias, & Eysenck, 1986). This gives plausibility to the nature theory. However, research was conducted using self-reports which is effected by environmental factors. Infant temperament research has also been cited to give meaning to the possible heritability of empathy (Gibbs, 1987), with the temperaments of babies relating to empathy levels later in life. Early childhood longitudinal studies support this phenomenon indicating that a temperament measure of a three-year old remains stable when measured again during adolescence (Caspi & Silva, 1995; Eisenberg, Fabes, et al., 1997). Perhaps the most compelling research supporting biological factors is brain research.

Brain research on empathy has been predominantly based on a trait theory by Eysenck (1990). Based on a biological foundation, three personality dimensions (i.e., extraversion, neuroticism, and psychoticism) give cause to how people respond to different situations. Extraversion is based on cortical arousal, and is associated with socialability and positive affect. The theory holds that introverts chronically experience overarousal, while extraverts experience underarousal. Thus, extraverts seek more stimulation in order to obtain increased levels of arousal. Brain waves, skin conductance, and sweating are all measures of arousal. Based on activation thresholds found in the sympathetic nervous system or visceral brain, neuroticism is the second personality

dimension. The visceral is responsible for the fight-or-flight reaction when encountering danger. Persons with neurosis, having low activation thresholds, experience fight-or-flight responses during minor stress situations. Heart rate, cold hands, sweat, blood pressure, and muscular tension assess activation thresholds. Finally, psychoticism is correlated with psychotic episodes and aggression; increased testosterone levels are found in psychoticism.

Using the Eysenckian model for psychopathy, Daberman (1999) studied the personality traits of 47 juvenile delinquents residing in four correctional institutions in Sweden. Most participants had been identified as antisocial before the age of 15. Eighty percent of the juvenile delinquents were violent offenders, and about 70% used violence daily as a means for communication. The juvenile delinquents were compared to 82 “normal” juvenile males on three personality inventories used to measure the biological basis of personality.

The participants were given the Eysenck Personality Questionnaire (EPQ-I) (Daberman, 1999) consisting of 114 true/false questions. This questionnaire contained an impulsivity scale assessing impulsiveness, venturesomeness, and empathy. Four classifications are a part of the EPQ-I: Extraversion (E), Neuroticism (N), Psychoticism (P), and the Lie Scale (L). Results found that juvenile delinquents scored significantly higher on E and N compared to their normal peers. A difference of two standard deviations was found on the P classification with delinquents scoring much higher. However, the delinquents scored lower than the normal adolescents on L indicating that they did not attempt to present themselves in a more favorable manner. The higher

psychopathy-related traits of the delinquents in this study, characterized by impulsivity, sensation-seeking, detachment, and aggression, offer further evidence of the possibility of biological factors contributing to empathy levels. More research is clearly needed to provide further insight to this theory of biology and hereditary.

While the possibility of twin studies, infant temperament research, and brain research may provide answers to why adjudicated youth typically exhibit lower levels of empathy, developmental factors cannot be overlooked. If individuals do develop empathy through a process of varying stages of emotional and moral growth, perhaps empathy can be taught. Examining studies related to infants, children, and adolescents with empathy may give direction for teaching this emotion.

Infants and empathy

Most of the debate over the nature/nurture issue associated with empathy is focused on infants. Geiger (1996) contends that people are born amoral and self-interested. Infants are driven by instinct and have no concept of right or wrong. As a result, infants, only if they are loved and nurtured, will follow with their parents' prohibitions and rules.

In contrast, Damon (1988) theorizes that infants are born with a natural ability for moral emotions. This researcher believes that at birth, potential for moral-reaction is present. To support his theory, Damon illustrates the common occurrence of babies crying at the sound of another infant's cries. Although it cannot be determined that the baby has mistaken another's pain for his own, it can be postulated that the infant is capable of spontaneously identifying with the pain of another. Even at this egocentric stage, the roots of empathy are possibly revealing themselves. Hoffman (1998) argues

that this is a “rudimentary precursor of empathy” (p. 93). Infants by seven months of age can distinguish between feelings such as happy, afraid, and sad (Kestenbaum & Nelson, 1990). Between one and two years of age, a baby is able to identify that people are independent beings and sense someone else’s discomfort. However, because of their age, the babies are unable to translate concern into action (Damon, 1988).

A classical study by Klinnert, Campos, Sorce, Emde, and Svejda (1983) illustrated the ability for one-year old infants to understand and discriminate between two emotions: happy and afraid. Infants were placed on a glass table that gave the optical illusion of a drop off to a cliff. As the infants advanced to the “visual cliff” edge, their mothers were instructed to smile or show fear. Seventy-four percent of the infants who saw their mother smile crossed the cliff. The mothers who showed fear found that none of their infants would cross the visual cliff.

Empathy is associated with inhibitory control (Kochanska, Murray, & Coy, 1997), which is the ability to maintain one’s emotions and conduct. At one-year of age, infants begin to develop effortful or inhibitory control in order to obey the “dos” and “don’ts” from their parents. Thus, infants consciously regulate their behaviors even at the expense of possible pleasurable consequences. This inhibitory control or self-regulation contributes to conscience development. The higher the inhibitory control, the higher the inner stability to maintain self-regulation and establish a conscience over time.

Early childhood and empathy

During early childhood, children are more able to take action in response to another in distress. Hoffman (1998) found that even toddlers were able to have empathic

reactions. Hoffman observed a toddler empathetically responding to a crying friend by bringing the friend the toddler's teddy bear. When the friend continued to cry, the toddler brought the friend's teddy bear. The friend hugged his bear and ceased from crying. Thus, the researcher concluded, young children are capable of developing empathy through corrective feedback after making egocentric mistakes.

As early as five years old, children are able to empathize with film characters (Strayer, 1993). Asking young children how they might feel in given situations will foster empathy (Schaeffer & Millman, 1981), but it appears that many young children gradually internalize empathic responses. Berndt (1981) studied friendships of children in kindergarten, second, and fourth grade. He found that young children are altruistic, and have internalized the standard of helping and sharing. However, there is an indication that young aggressive boys exhibit lower levels of empathy (Mehrabian & Epstein, 1972) thus, further study on the correlation of aggressiveness and empathy in young children is needed.

Although many children exhibit altruistic behaviors in early childhood, antisocial behavior is evident as well. Temperament and emotion regulation are relatively consistent over time (Caspi & Silva, 1995; Eisenberg, Fabes et al., 1997; White, Moffitt, Earls, Robins, & Silva, 1990). Young children who are able to self-regulate their emotions are better able to handle stress, and are generally better liked by their peers (Eisenberg, Fabes et al., 1997; Eisenberg, Guthrie, et al., 1997). Longitudinal studies suggest that antisocial behavior manifests early and remains stable (Caspi & Silva, 1995; White et al., 1990).

Adolescents and empathy

During adolescence, individuals are to take on more responsibility and deepen relationships. Adolescence is a practicing stage for future meaningful relationships (Haynes & Avery, 1979). Youth are faced with more moral dilemmas and expected to act according to social norms. Consequently, empathy is a necessary emotion for effective moral development of adolescents.

As previously stated, establishing prosocial relationships is critical for youth (Asher, 1983; Berndt, 1982; Eisenberg & Miller, 1987; Hoffman, 1998; Rice, 1992). Parents (Marcus & Betzer, 1996; Patterson et al., 1989; Rice, 1982) and friends (Buhrmester, 1990; Rice, 1992; Seltzer, 1982) significantly impact the choices teens make. Ford, Wentzel, Wood, Stevens, and Siesfeld (1989) studied moral decision-making of 218 adolescents in San Francisco high schools. The participants answered questions about social responsibility and irresponsible behaviors. Researchers found that social responsibility was motivated by feelings of guilt, empathy, and fear of negative consequences. When told that nothing bad would happen as a result of irresponsible behavior, the youth were motivated by self-interest and peer approval. The researchers concluded that teens need guidance, monitoring, and discipline in order to make responsible, moral choices.

One study found a positive correlation between empathetic youth and healthy behaviors. Kalliopuska (1992) studied empathy and narcissism of 4,268 youth, ages 14 to 20 years old. Youth with the highest levels of empathy were more assertive, honest, and sensitive compared to those with the lowest levels of empathy. Additionally, youth with

high levels of empathy were less narcissistic, and expressed negative attitudes towards nicotine and alcohol use. Clearly, empathy had a positive impact on the emotions and behaviors in these adolescents.

Adjudicated youth

“Delinquency in adolescence is a heterogeneous expression of general maladjustment” (White et al., 1990, p. 522). Juvenile delinquent behavior is typically preceded by a history of antisocial behavior and peaks during middle adolescence. Researchers continue to study and postulate when and how empathy is developed in babies, young children, and adolescents. Although there appears to be a biological component (Caspi & Silva, 1995; Damon, 1988; Eisenberg, Fabes et al., 1997; Gibbs, 1987; Rushton et al., 1986) and a sequential maturation process to learning empathy (Hoffman, 1998), enough research exists to support the potential of teaching empathy (Hayes & Avery, 1979; McDermott-Murphy, 1994; Wright, 1994) With the purpose of bettering lives and society, teaching empathy could significantly impact adjudicated youth. Perhaps if taught empathy, these youth would develop more prosocial relationships and bonds with others. Furthermore, having empathy for others might deter many of these youth from perpetrating illegal and violent acts. Several researchers are suggesting that empathy can be taught to children (Briggs, 1975; Doyle & Behrens, 1986; McDermott-Murphy, 1994; Morgan & Reinhart, 1991; Schaeffer & Millman, 1982) and adolescents (Haynes & Avery, 1979; Kalliopuska, 1992; McDermott-Murphy, 1994), but more specifically, adjudicated youth (Arbuthnot & Gordon, 1988; Geiger, 1996; Gibbs, 1987; Kendall et al., 1977; Petry, Bowman, Douzenis, Bolding, & Kenney, 1991).

Cook (1985) studied 20 adjudicated male adolescents on probation. Ten subjects, the experimental group, were participating in the Guided Group Interaction: Positive Peer Culture (GGI:PPC) (Bennett, Rosenbaum, & McCullough, 1978) for two hours daily. The program uses peer pressure to push delinquents towards social and legal conformity to societal norms. Discussions over individual problems require group effort from all delinquents participating. The group leader facilitates the discussions by acting as a consultant and directing the group away from solving problems in a delinquent manner. Adopting societal values of social competence and moral responsibility is promoted. GGI:PPC is widely used for correctional treatment of juvenile delinquency under the assumption that reasoned discussions from the peer group will be internalized resulting in personality changes. Future positive behaviors will be motivated by the personality changes.

Both groups in Cook's study were given pretest and posttest of the Sentence Completion Test of Ego Development (SCT) and the Defining Issues Test (DIT). SCT measures ego development from preconformity to maximum conformity to postconformity. Based on the work of Kohlberg, the DIT is an objective test measuring moral reasoning. The DIT focuses on six stages: (a) obedience, (b) instructional egoism and simple exchange, (c) interpersonal concordance, (d) law and duty to the social order, (e) social consensus, and (f) nonarbitrary social cooperation. It is considered highly appropriate for use with juvenile delinquents because the verbal skills needed for the recognition/comprehension task are limited.

SCT pretests indicated that both groups were predominantly in the low ego-

development stage, pre-conformity. After the GGI:PPC treatment, the experimental group made significant improvement by moving from the preconformist level to the maximum conformist level. Posttest scores for the control group found no differences than the pretest scores.

Seventy-nine percent of the adjudicated youth were in the lowest level of moral development on the DIT pretest. Posttest scores revealed little overall change in the moral judgement of both groups. However, the treatment group did make gains in the law and duty to social order stage, but only at the expense of the interpersonal concordance stage. Cook believes that the lack of significant improvement may be a result of subjects not completely understanding the DIT. Subjects were average to low average intelligence, and Cook noted that adjudicated youth are notorious for having learning and academic problems.

Cook believes the GGI:PPC is beneficial for adjudicated youth, and her results indicate that positive impacts can be made. However, participants were initially unmotivated to “help each other with their problems” (p. 97). This again shows further evidence of the lack of empathy of adjudicated youth. Treatment, such as the GGI:PPC, which facilitates ego and moral reasoning development may result in increased empathy for these youth.

Gibbs (1987) has similar recommendations for treatment of adjudicated youth. His sociomoral-developmental approach provides adjudicated youth with relevant dilemmas during group discussions. The youth have remedial role-taking opportunities in hopes of moving them to higher levels of moral reasoning. Chances to experience situations from

the perspective of others are given. The dilemmas focus on situations typical for adjudicated youth to encounter, and are set up to facilitate increased moral development. The author suggests two-hour daily sessions for incarcerated youth with follow-up sessions once on parole. Gibbs theorized that dilemma sessions promote cognitive and effective development needed for empathetic responses. As a result, empathetic reactions become less superficial and are more readily elicited by the delinquents.

Although moral reasoning and ego development promotes empathetic skills, specifically targeting empathy training is recommended (Kalliopuska, 1992). Haynes and Avery (1979) initiated a study on training adolescents in self-disclosure and empathy skills. An experimental group of 25 adolescents received 16 hours of training in with relevant conceptual knowledge and behavioral practices on self-disclosure and empathy. Twenty-three adolescents in the control group received no training during the four week study period. Results found significant improvement by the experimental group in their ability to self-disclose and exhibit empathetic responses. Whereas the participants studied were not identified as adjudicated youth, the possibility of specifically teaching empathy is promising.

It has been postulated that adjudicated youth perceive education as vehicle for escaping violent environments (Morin & Welsh, 1996). Morgan and Reinhart (1991) believe it is the responsibility of teachers to teach children to be morally competent. Clearly, schools dedicated to helping troubled youth should offer support and programs in hopes of preventing delinquency. Furthermore, juvenile correctional facilities should be committed to promoting empathy in adjudicated youths. While dilemma sessions

(Cook, 1985; Gibbs, 1987) and behavioral practices (Haynes & Avery, 1979) have had some positive results, bibliotherapy (Adler & Foster, 1997) has also been a suggested alternative. Traditionally, treatment has been therapy (Gibbs, 1987), but the group dilemma sessions appear most promising in ameliorating empathy in adjudicated youth.

Phases of Re-Socialization

TYC (1999) created a re-socialization training program for adjudicated youth in correctional facilities addressing internal and behavioral changes. A multidisciplinary team assess the progress of each youth as he/she progresses through five phases required for release. Input from the three critical areas of a youth in a TYC facility (i.e., correctional therapy, daily life, and academic/vocational instruction) is used for monthly phases evaluation. Each phase contains various domains requiring increased internal and behavioral growth for the adjudicated youth. The area of correctional therapy specifically addresses empathy at each phase level.

Phase one is identified as orientation and control. Youth begin to adjust to new surroundings, program expectations, and rules. Youth exhibit external control, and have not internalized the program norms. Phase two to is depicted as discomfort and motivation. Youth will be challenged to address and contemplate the impact of living a negative and delinquent life. Life Stories are completed resulting in youth evaluating unmet needs that may have led to delinquent behaviors. During this phase, youth begin to internalize change by relating what they have learned to their self. Phase three, hope and positive expectations, require youth to address making appropriate choices for their lives and futures. Accepting responsibility for their actions and how their behavior impacted

victims is critical. Internal change is noticeable, with youth demonstrating self-initiated re-socialization practices consistently.

Phase four, personalization and experimentation, has youth maintaining re-socialization objectives and generalizing to their personal life. Phase four youth have progressed to less structure and are used as role models for other youth. Self-esteem, leadership responsibilities, and helping others skills are increased. Parole phase, integration and maintenance, require youth to have realistic success plans and strategies for impending delinquent relapse. Youth understand risky situations and can stop personal thinking errors. During this phase, youth continue displaying re-socialization objectives and generalize their internal changes into the community.

The three areas addressed in each phase require increasing skills by the youth. Daily life focuses on behavior, discipline training, and work. Academic and vocational education addresses participation and achievement. Correctional therapy has seven domains in each phase: layout, thinking errors, life story, offense cycle, success plan, empathy, and values development. As the youth progresses to the next phase, expectations in each area's domain increases.

Empathy, during phase one, is very basic with youth only having to identify feeling words and communicate empathy and victim concepts. Phase two empathy requires the youth to apply the feeling words to describe personal reactions to events connected with peers, victims, and others. Youth must explain how a lack of empathy can lead to the victimization of other individuals. At the phase three level, the empathy domain involves youth demonstrating appropriate empathic responses to victims. Youth must detail how

victims were effected by offense.

Phase four empathy is more in depth having the youth display appropriate empathic reactions to a broad range of others. Youth must delineate how they can make amends to the people they have hurt. Empathy at the parole phase requires youth to behave appropriately by not victimizing or manipulating other people. Youth must explain how empathy can contribute to feeling connected to the community and prevent future victimization.

Phases of Re-socialization clearly details the internal and behavioral changes needed for adjudicated youth to integrate back into society. Empathy is addressed cognitively and affectively, requiring adjudicated youth to conceptualize and internalize empathic emotions. Empathy is needed for adjudicated youth to successfully transition into community life and prevent relapse.

Conclusion

Poor aptitudes in the cognitive and affective foundations of empathy render adjudicated youth deficit in moral reasoning. As empathy is associated with prosocial relationships (Bryant, 1982; Rice, 1992; Schonert-Reichl, 1993), adjudicated youth lack the bonds and needed skills for quality relationships with parents (Loeber & Dishion, 1983; Marcus & Betzer, 1996; Marcus & Gray, 1998; Matlack et al., 1994; Tolan, 1988) and friends (Marcus, 1996). In order to ameliorate empathy in adjudicated youth and others, investigators have attempted to discover if empathy is biological or learned. Research has suggested that beginning empathy is present during infancy, and early childhood is a time for developing inhibitory control which impacts empathy levels.

Still, no definitive answer has been found; however, many researchers believe that empathy can be taught (Gibbs, 1987; Haynes & Avery, 1979; Kalliopuska, 1992). Because early antisocial behavior is the best predictor for later antisocial behavior, targeting at-risk children and teaching them empathy could possibly prevent delinquency. Keeping with this school of thought, if empathy can be successfully taught to adjudicated youth, perhaps training may reduce the recidivism rate. TYC (1999) uses a re-socialization program containing an empathy component. The aim of the Phases of Re-socialization is to prevent adjudicated youth from relapsing back to delinquent behaviors. Addressing factors related to empathy levels of adjudicated youth and teaching empathy is essential.

CHAPTER III

METHODOLOGY AND PROCEDURES

A psychological construct, empathy is a synthesis of affective and cognitive domains producing an emotional understanding. Because empathy is a response human beings are expected to possess, individuals lacking empathy may experience deficits in appropriately and effectively relating to others. The purpose of this study was to examine the empathy levels of youth placed at four different correctional facilities. The study attempted to determine if empathy levels among adjudicated youth can be differentiated by (a) age, (b) intelligence quotient (IQ), (c) type of offense, and (d) disability status. This study also investigated the impact of an empathy component in a re-socialization program used at the four juvenile correctional facilities. This chapter discusses the methodology used in the study by addressing the research questions, subject selection, instrumentation, data collection, and data analysis.

Research Questions

The review of literature illustrated that adjudicated youth lack empathy necessary to acquire, repair, and maintain relationships. However, definitive studies addressing the relevance of age, intelligence, type of offense, and disability related to the empathy levels of adjudicated youth has yet to be established. Empathy levels based on factors of incarcerating facility, age, IQ range, type of committing offense, disability status, and phase of re-socialization training were examined. Six research questions were used to guide this study.

Research Question #1

What differences exist in the empathy level scores obtained from the IRI of adjudicated youth in the four different correctional facilities?

Research Question #2

What differences exist in the empathy level scores obtained from the Interpersonal Reactivity Index (IRI) for adjudicated youth ages 14, 15, 16, and 17?

Research Question #3

What differences exist in the empathy level scores obtained from the IRI for adjudicated youth with IQs of 55-70, 71-85, 86-100, 101-115, 116 and above?

Research Question #4

What differences exist in the empathy level scores obtained from the IRI for adjudicated youth with a committing offense of aggravated assault, aggravated robbery, arson, burglary, capital murder, manslaughter, sexual assault, or substance offense (e.g., using, buying, selling)?

Research Question #5

What differences exist in the empathy level scores obtained from the IRI for adjudicated youth with emotional/behavioral disorders (E/BD), learning disabilities (LD), or not identified as having a disability (ND)?

Research Question #6

What differences exist in the empathy level scores obtained from the IRI in the Texas Youth Commission's Phases of Re-socialization training program for adjudicated youth

at phase one, phase two, phase three, phase four, and parole phase?

Setting

Subjects for this study were juvenile delinquents incarcerated at four juvenile correctional facilities in Texas. Each facility is operated by the Texas Youth Commission (TYC). All participants were males placed by the court system.

Subject Selection

Permission to conduct this study was obtained from the TYC by following the guidelines of their research policy (See Appendix A). The investigation was approved by the Institutional Review Board (IRB) of the University of North Texas (See Appendix B). TYC personnel administered the IRI to youth incarcerated at the four facilities. TYC provided the completed tests and factor information for sorting the subjects. Youth were sorted into groups based on factors of (a) age, (b) IQ, (c) type of offense, (d) disability status, (e) phase and (f) facility. A single individual may have been used in data collection to answer several research questions. For example, a 16-year-old youth with E/BD, an IQ of 93, incarcerated for arson, at the phase three level may have possibly been represented in each research question. His empathy level scores may have been a part of total scores for 16- year-olds; it may also have been used in the total scores for youth with IQs ranging between 86 and 100.

Subject confidentiality was maintained throughout the study. Youth were assigned a code number. Once given a number, a review of records to identify age, IQ, type of offense, disability status, and phase of the participant was conducted. From the list of 535 eligible subjects, a random sampling was drawn. The researcher selected the coded

numbers of subjects using a random table of numbers.

Instrumentation

Record reviews and the IRI (Davis, 1983) were used in data collection. The IRI (See Appendix C) was used in the TYC facilities to measure the cognitive and affective empathy levels of adjudicated youth. The empathy levels measured by the IRI were employed in conjunction with information from the records review: age, IQ, type of committing offense, disability, phase, and incarcerating facility. Using descriptive discriminant functional analysis, computations were conducted to determine the results of the study.

IRI

A 28-item index measuring affective and cognitive empathy, the IRI has four components: (a) Perspective Taking (PT), (b) Empathic Concern (EC), (c) Fantasy (FS), and (d) Personal Distress (PD). PT is cognitive in nature, addressing the ability to understand the point of view of others; it is associated with role-taking. EC addresses affective empathy by measuring the ability to have benevolence and concern for others encountering negative experiences. FS assesses a person's ability to identify with fictitious characters. PD associated with affective empathy, measures the extent of one's ability to share the negative emotions of another person.

The IRI has been found to be congruent with a multi-facet approach to empathy (Coke, Batson, & McDavis, 1978), addressing both cognitive and affective levels. Recognizing the interaction between cognitive and affective processes in empathy allowed the researchers to obtain a more accurate empathic level of adjudicated youth.

The IRI has been found reliable in measuring adolescents (Hatcher, Nadeau, Walsh, Reynolds, Galea, & Marz, 1994) and adjudicated youth (Cohen & Strayer, 1996; Lee & Prentice, 1988). The four subscales of the test not only support the integrative approach to empathy (Chlopan et al., 1985; Hatcher et al., 1994) but, have been found valid when tested against other empathy measures. The subscales, recognized as four different elements of empathy, demonstrate a predictive relationship with each other. In addition to being found valid and reliable, the IRI is correlated with the Hogan Empathy Test and the Questionnaire Measure of Emotional Empathy (Davis, 1983), two of the more traditionally used scales of empathy (Chlopan et al., 1985; Davis, 1983).

Data Collection

Data were collected from four correctional facilities through the mail once permission was granted by TYC and the IRB. Collection of data required a review of student records to identify age, IQ, type of offense, disability, and phase of each youth, and the completed IRI tests.

Data Analysis

Descriptive discriminant function analysis is the most appropriate statistical measure to address the research questions of this study (Statistical Package for the Social Sciences, SPSS, 1999). Discriminate analysis is associated with multiple regression and multivariate analysis of variance (Fox, 1997; Hinkle, Wiersma, & Jurs, 1994). Similar to a one-way multivariate analysis of variance, cases from the groups of age, IQ, type of offense, disability, phase are used (SPSS, 1999). These groups are the dependent variables, with age and IQ having four levels each. Type of offense has eight levels,

disability status has three levels, and phase of the re-socialization program has five levels.

Discriminant procedures were employed to classify a linear combination of the quantitative predictor variables, cognitive empathy and affective empathy that best represented the differences among the groups. Discriminant analysis was useful for building functions for classifying new cases and determining which variables among several were the most helpful for discriminating among groups. Testing multivariate differences among groups and identifying which groups were most alike were reasons to employ discriminant analysis (SPSS, 1999).

Using the Statistical Package for the Social Sciences (SPSS) (Norusis, 1994), descriptive discriminant function analysis was performed. The discriminant analysis determined how well a function that included age, IQ, type of offense, disability, and phase was distinguished between cognitive and affective empathy. A multivariate analysis of variance test statistic, the Wilks' Lambda analyzed if differences exist among the group means. The discriminant procedures offered informative statistics describing group differences (SPSS, 1999).

CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this study was to examine the empathy levels of youth placed at four different correctional facilities. The study attempted to determine if empathy levels among adjudicated youth can be differentiated by (a) age, (b) intelligence quotient (IQ), (c) type of offense, and (d) disability status. This study also investigated the impact of an empathy component in a re-socialization program used at the four juvenile correctional facilities. Using the Interpersonal Reactivity Index (IRI), empathy levels of adjudicated youth, sorted into the five factor groups, were scored. School records kept by the Texas Youth Commission (TYC) provided information on the youth by age, IQ, type of committing offense, disability, and phase level. Findings of the study are addressed as (a) description of the subjects, (b) group statistics, (c) findings of significance, (d) summary of findings, and (e) personal reflection.

Description of Subjects

Subjects for the study were adjudicated youth placed at four juvenile correctional facilities by the courts. All facilities are located in Texas and are part of the Texas Youth Commission. At the time of the study, 535 juveniles incarcerated at the four facilities had been administered the IRI, and deemed eligible for the study. Youth were randomly selected, but the number of youth representing the different factors (e.g., incarcerating facility, age, IQ, disability status, phase) were often unequal (see Table 1). The selection of subjects was the result of different representation of populations in the four incarcerating facilities. Numbers of youth at each facility varied, as did their age, IQ, type

of offense, and disability status. Facilities two and three housed more youth than facilities one and four. This is a result of capacity at each facility.

Table 1

Number of Subjects Used in the Study By Incarcerating Facility

Facilities	<u>Subjects used in the study</u>	
	Number (n = 170)	Percent
1	27	15.9
2	52	30.6
3	50	29.4
4	41	24.1

Table 2 demonstrates the fluctuation in populations for the age factor. Sixteen-years-old and 17-years-old youth used in this study had higher representation in the facilities as compared to 14 and 15-year-old youth. This may be a result of younger delinquents being incarcerated with less frequency than older delinquents. Also, 16 and 17-year-old delinquents may have had additional time to commit more crimes.

Table 2

Current Ages of Subjects Used in the Study

Age	<u>Subjects in age category</u>	
	Number (n = 99)	Percent
14 years	8	8.1
15 years	16	16.2
16 years	35	35.4
17 years	40	40.4

A normal distribution would expect the majority of the IQ scores to fall in the 86-100 and 101-115 ranges (Salvia & Ysseldyke, 1995). Youth in this study were found to have lower IQs than in a normal distribution of a population. Table 3 demonstrates that subjects with IQs between 71-85 and 86-100 were greater in number than the other IQ ranges. Seven subjects were found to have IQs above 116, which is considered as above average IQ (Salvia & Ysseldyke, 1995). Youth with IQs of 116+ were the fewest in number compared to the other youth with other IQ ranges used in this study. Representing the population with mental retardation (MR), 13 subjects had IQs ranging between 55-70.

Table 3

IQ Ranges of Subjects Used in the Study

IQ ranges	<u>Subjects used in the study</u>	
	Number (n = 160)	Percent
55-70	13	8.1
71-85	50	31.3
86-100	57	35.6
101-115	33	20.6
116+	7	4.4

An inspection of Table 4 demonstrates that youth in this study were incarcerated more for aggravated assault, burglary, sexual assault and substance offense, than for aggravated robbery and arson. The nature of the crime may dictate the probability of being incarcerated. However, other variables (e.g., prior offenses, lawyer representation, victim of the crime) may also impact the likelihood of being adjudicated. Capital murder and manslaughter were omitted variables because none of the subjects in the study were incarcerated for these offenses.

Table 4

Committing Offenses of Subjects in the Study

Offense	<u>Subjects by committing offense</u>	
	Number (n = 121)	Percent
Aggravated assault	26	21.5
Aggravated robbery	12	9.9
Arson	8	4.7
Burglary	24	19.8
Sexual assault	29	24.0
Substance offense	22	18.2

As can be seen in Table 5, subjects in the disability status were fairly evenly distributed. The greatest number of subjects were not identified as disabled (ND), followed by those with LD, and those with E/BD. However, when the LD and E/BD categories are combined, 62% of the subjects in this study have disabilities. Incarcerating facilities typically have a high number of inmates identified as having special needs. Furthermore, often incarcerated youth are underidentified as having a disability (Nelson et al., 1987).

Table 5

Disability Status of Subjects Used in the Study

Disability Status	<u>Subjects used in the study</u>	
	Number (n = 78)	Percent
E/BD	22	28.2
LD	27	34.6
ND	29	37.2

Note. E/BD and LD categories combined equal 62% of subjects in disability status group.

Each phase in the Phases of Re-socialization was not equally represented. More youth were represented in phases one, two, and three compared to phases four and parole. Reaching phase four and parole phase requires a great amount of work and self-introspection (TYC, 1999). The difficulty in reaching these two phases result in lower representation at this level of the re-socialization program (see Table 6).

Table 6

Phases of Re-socialization Represented by Subjects in the Study

Phases	<u>Subject used in the study</u>	
	Number (n = 91)	Percent
1	24	26.3
2	23	25.5
3	23	24.5
<u>table continues</u>		
Phases	<u>Subject used in the study</u>	
	Number (n = 91)	Percent
4	12	10.2
Parole	9	4.5

Group Statistics

Discriminant analysis is a technique researchers use to discern between two or more groups, and to classify cases into groups with respect to multiple variables. In this study, the group statistics describe differences among incarcerating facility, age, IQ, type of offense, disability and phase in deference to the four components of the IRI. The Wilks' Lambda is a test of significance that analyzes differences between groups. A high Lambda is close to 1.00, signifying little differences between and within groups. A small Lambda indicates significant differences between and within groups. If a Wilks Lambda finds significance, a discriminant function prediction equation is computed to determine accuracy of classification results.

Five hundred college males were used to norm the IRI with mean scores of the four

components as 17 for Perspective Taking (PT), 16 for Fantasy (FS), 19 for Empathic Concern (EC), and 9 for Personal Distress (PD). The grand mean score for the total IRI Empathy Level (EL) was normed at 61 (Davis, 1983).

Tables 7 through 12 give data on how each factor (e.g., incarcerating facility, age, IQ, type of offense, disability status, phase) compares with average scores on the four components and total empathy score of the IRI. Group statistics for each factor provides information in discriminating and classifying the groups.

Table 7 illustrates differences in scores of 170 youth at the four incarcerating facilities compared with each other and the normed scores of the IRI. Facilities one, two and four have similar scores on all subscales and the total EL. However, facility three demonstrates much lower empathy scores on all subscales and the total EL. Differences may be the result of facility three incarcerating youth committing more callous and severe crimes. Inconsistencies in test administration may also be a reason for the lower scores at facility three.

Table 7

Empathy Scores of Subjects as Measured by the IRI by Facility

Facility	Empathy				
	Perspective	Fantasy	Empathic	Personal	Total Empathy
	Taking (PT)	(FS)	Concern (EC)	Distress (PD)	Level (EL)
	(17)*	(16)*	(19)*	(9)*	(61)*
1	14	16	17	12	59
2	15	15	16	12	58
3	9	9	7	6	31
4	15	14	16	12	57

Note. * represents the normed scores on the IRI subscales and total.

Table 8 provides information on the various ages of adjudicated youth used in the study related to the four empathy components and the total EL. Based on age, the youth do not exhibit any significant differences related to empathy. PT and FS were the highest for youth age 15, while subjects ages 14 and 16 scored the lowest on PT. FS was the lowest for 17-year-old youth. EC, feeling compassion for others experiencing difficulty, was found to be the highest among the 15-year-old subjects, and the lowest for 17-year-old adjudicated youth. PD was the highest among 14-year-old and 15-year-old subjects, but the lowest for 17-year-old youth. Fifteen-year-old subjects appear to have the highest EL, with a score of 59. However, this is still considered lower than the normed EL for males. Consistent with current research (Aleksic, 1975; Cohen & Strayer, 1996; Ellis, 1982; Gibbs, 1987; Marcus & Gray, 1998), adjudicated youth in this study exhibited low levels of empathy.

Table 8

Empathy Scores of Subjects Measured by IRI by Age

Age	Empathy				
	Perspective	Fantasy	Empathic Concern	Personal	Total Empathy
	Taking (PT)	(FS)	(EC)	Distress (PD)	Level (EL)
	(17)*	(16)*	(19)*	(9)*	(61)*
14	11	13	12	11	46
15	16	15	17	11	59
16	11	12	12	10	45
17	13	11	11	8	43

Note. * represents the normed scores on the IRI subscales and total.

Inspection of Table 9 suggests that empathy scores were relatively stable across groups for IQ. Subjects with IQs ranging between 55-70 scored the highest (14) on PT, the ability to recognize and understand the view points of others. The lowest scores on PT, a cognitive function, were subjects with IQs of 116 or above. FS has been found to be correlated with higher IQs (Davis, 1983). Youth with IQs ranging from 86-100 and 101-115 scored the highest on FS, but the scores were still lower than the normed average. Subjects with the highest IQs of 116+ did not demonstrate a high FS score as the test typically predicts for individuals with high IQs, but this may have been the result of the small numbers of subjects in this IQ range. EC scores were below average for all groups. Subjects with IQs in the 101-115 and the 116 and above ranges had average scores on PD. Subjects with IQs in the ranges of 55-70 and 101-115 scored the highest in EL, 54 and 53 respectively. Scores on EL were much lower than the normed score of 61.

Table 9

Empathy Scores of Subjects Measured by IRI by IQ Range

IQ range	Empathy				
	Perspective	Fantasy	Empathic	Personal	Total Empathy
	Taking (PT)	(FS)	Concern (EC)	Distress (PD)	Level (EL)
	(17)*	(16)*	(19)*	(9)*	(61)*
55-70	14	13	15	12	54
71-85	12	11	13	11	47

table continues

IQ range	Empathy				
	Perspective	Fantasy	Empathic	Personal	Total Empathy
	Taking (PT)	(FS)	Concern (EC)	Distress (PD)	Level (EL)
	(17)*	(16)*	(19)*	(9)*	(61)*
86-100	13	14	14	11	51
101-115	15	16	15	9	53
116+	10	12	10	8	41

Note. * represents the normed scores on the IRI subscales and total.

In examining type of offense in Table 10, PT scores were relatively consistent across offense; subjects incarcerated for burglary, sexual assault, and substance offense scored the highest, all earned a 14. Aggravated robbery was the lowest for PT. All PT scores were lower than the average. The highest scores on FS was for sexual assault and arson (16). FS was the lowest for aggravated robbery (10), followed by substance offense (11). EC was the highest for the sexual assault group, but the lowest for the aggravated

robbery group. PD was the highest for those committed for arson, and the lowest for subjects committed for aggravated robbery. Sexual assault (58) and arson (60) were close to average EL scores (61). However, subjects incarcerated for committing aggravated robbery exhibited the lowest EL with a score of 38, followed by substance offense with 47, aggravated assault with 53, and burglary with 54.

Table 10

Empathy Scores of Subjects as Measured by the IRI by Type of Offense

Type of offense	Empathy				
	Perspective	Fantasy	Empathic	Personal Distress	Total Empathy
	Taking (PT)	(FS)	Concern (EC)	(PD)	Level (EL)
	(17)*	(16)*	(19)*	(9)*	(61)*
Agg. assault	13	15	14	11	53
Aggr. robbery	11	10	9	8	38
Arson	13	16	16	15	60
Burglary	14	14	16	11	54
Sexual assault	14	16	17	11	58
Substance Off.	14	11	12	10	47

Note. * represents the normed scores on the IRI subscales and total.

In assessing empathy and disability status, Table 11 reveals that subjects with E/BD scored the highest on PT (16), and adjudicated youth without a disability scored the lowest (12). FS was the highest for youth with LD, and the lowest for ND. Youth with

LD were the highest on EC, with those without an identified disability scoring the lowest (11). Subjects with LD scored the highest on PD (12), again, subjects without an identified disability scored the lowest (8). For total EL, subjects with LD scored the highest (58), followed by subjects with E/BD (55); subjects with ND have the lowest EL (44).

Utilizing data gained from measuring IQ and empathy, subjects with IQs ranging between 55-70 (MR) scored a 14 on PT, 13 on FS, and 15 on EC. These subscales scores were below average. PD was higher than average for youth with MR; scoring a 12 compared to the normed PD score of 9. Youth with MR scored a 54 on total EL, which is lower than average.

Table 11

Empathy Scores of Subjects Measured by the IRI by Disability Status

Disability status	Empathy				
	Perspective	Fantasy	Empathic	Personal	Total Empathy
	Taking (PT)	(FS)	Concern (EC)	Distress (PD)	Level (EL)
	(17)*	(16)*	(19)*	(9)*	(61)*
E/BD	16	15	15	11	55
LD	14	16	16	12	58
ND	12	13	11	8	44

Note. * represents the normed scores on the IRI subscales and total.

Table 12 reveals that the Phases of Re-Socialization may be successfully impacting the incarcerated youth. Phase three, four, and parole exhibit average to above average

scores on PT, FS, and EC, while phase one and phase two level youth have below average scores. Phase four had the highest PT score (18), which is higher than the normed score; whereas, youth in phase three and parole phase met the average score of 16. Phase two level youth demonstrated the lowest scores on PT (12), FS (12), and EC (11). PD was higher than average for all phase levels, with the highest score (14) obtained by phase four and the parole phase. Total EL scores were above average for youth at the phase three (63), four (66), and parole (65) levels. The lowest score on EL was obtained by youth at the phase two level (44), followed by youth at the phase one level (55).

Table 12

Empathy Scores as Measured by the IRI by Phase

<u>Phases of</u> <u>Re-socialization</u>	Empathy				
	Perspective	Fantasy	Empathic	Personal	Total Empathy
	Taking (PT)	(FS)	Concern (EC)	Distress (PD)	Level (EL)
	(17)*	(16)*	(19)*	(9)*	(61)*
Phase 1	14	15	15	11	55
Phase 2	12	12	11	10	44
Phase 3	16	16	18	12	63
Phase 4	18	17	17	14	66
Parole Phase	16	17	18	14	65

Note. * represents the normed scores on the IRI subscales and total.

Findings of Significance

Data were inspected visually before conducting a discriminant analysis to test the assumptions of normality and homogeneity. Using SPSS, the researcher was protected from statistical instability that results from multicollinearity by rejecting the factors that may enter under the minimum tolerance level. The minimum tolerance level is set by default in SPSS at .001.

The analysis of data on all subjects was conducted using SPSS (Norusis, 1994) using discriminant functions. Wilks' Lambda is defined as the degree of the total variance in the discriminant scores not explained by differences among the group. This statistic is used to test the null hypothesis that the means of all the factors across groups are equal. Wilks' Lambda also provides data regarding individual differences. Small values indicate strong group differences, while values close to 1.00 signify no difference. The F ratio, a technique used to examine differences between several means, tests whether the observed difference between variances is significant. Significance was set at the .05 level, thus anything less than .05 was considered significant in the model (SPSS, 1999).

Addressing differences among factors in each group provides information about significance. Discriminant analysis uses Tests of Equality of Group Means for reporting the differences and indicating significance. Tables 13 through 18 demonstrates the statistical results of the analysis of difference using ANOVA.

Although the incarcerating facility factor was found to be significant for PT, FS, EC, PD, and EL, further investigation of the data found that only one facility was being discriminated. Facility three was discriminated by all components of the IRI and the total

EL score (see Table 13).

Table 13

Significance and Differences for Facility

Factors	Wilks'	F	df1	df2	Sig.
	Lambda				
Perspective Taking (PT)	.816	12.444	3	166	.000*
Empathic Concern (EC)	.640	31.182	3	166	.000*
Personal Distress (PD)	.754	18.036	3	166	.000*
Empathy Level (EL)	.597	37.342	3	166	.000*

Note. * represents significance at <.05.

Table 14 displays the univariate statistics for the predictors in the model for age. Four ANOVAs were calculated and demonstrated no differences among age groups in PT, FS, EC, PD, and EL.

Table 14

Significance and Differences for Age

Factors	Wilks'	F	df1	df2	Sig.
	Lambda				
Perspective Taking (PT)	.953	1.566	3	95	.203
Fantasy (FS)	.955	1.497	3	95	.220
Empathic Concern (EC)	.910	3.120	3	95	.030
Personal Distress (PD)	.960	1.321	3	95	.272
Empathy Level	.931	2.330	3	95	.079

Although discriminant analysis determined that age was not a discriminating factor in this study, IQ was found to have differences in FS (see Table 15). The other subscales were unable to discriminate between IQ ranges of the subjects. Total EL score was not found significant. Further investigation of the data addressing predictor variables from the centroid of each group concluded that subjects with IQs between 71 and 85 and subjects with IQs between 101 and 115 were differentiated by the FS component of the IRI.

Table 15

Significance and Differences for IQ Range

Factors	Wilks' Lambda	F	df1	df2	Sig.
Perspective Taking (PT)	.961	1.5666	3	95	.203
Fantasy (FS)	.873	1.497	3	95	.022*
Empathic Concern (EC)	.969	3.120	3	95	.030
Personal Distress (PD)	.956	1.321	3	95	.272
Empathy Level (EL)	.970	2.330	3	95	.079

Note. * represents significance at <.05.

Types of incarcerating offenses found significance in FS, EC, and EL. Subscales PT and PD of the IRI were unable to discriminate between types of offenses. Table 16 displays the significance found for the types of offense group after computing the discriminant function. Using scores on predictor variables from the centroid of each group, it was determined that subjects incarcerated for aggravated robbery were

differentiated by FS. Youth committed for aggravated robbery and sexual assault were discriminated by EC and EL. Other committing offenses were not found to be significant in the discriminant analysis.

Table 16

Significance and Differences for Types of Offense

Factors	Wilks' Lambda	F	df1	df2	Sig.
Perspective Taking (PT)	.975	.952	5	115	.706
Fantasy (FS)	.881	3.093	5	111	.012*
Empathic Concern (EC)	.860	3.731	5	115	.004*
Personal Distress (PD)	.938	1.519	5	115	.189
Empathy Level (EL)	.879	3.177	5	115	.010*

Note. * represents significance at <.05.

Disability status varied significantly in the subscales of EC, PD, and the total EL of the IRI. Table 17 denotes the statistical significance found for disability status. PT and FS were not found to discriminate between youth with E/BD, youth with LD, or youth without an identified disability. Inspection of the data found that youth with LD and youth with ND could be discriminated by EC. The subscale, PD, classified youth with LD, youth with E/BD, and youth not identified as having a disability. Subjects with LD and subjects with no disability label were discriminated by EL. Subjects identified as having E/BD were not differentiated by the total EL.

Table 17

Significance and Differences for Disability Status

Factors	Wilks' Lambda	F	df1	df2	Sig.
Perspective Taking (PT)	.932	2.757	2	75	.070
Fantasy (FS)	.979	.813	2	75	.447
Empathic Concern (EC)	.915	3.502	2	75	.035*
Personal Distress (PD)	.849	6.695	2	75	.002*
Empathy Level (EL)	.887	4.773	2	75	.011*

Note. * represents significance at <.05.

Significance was found on the IRI for the phase on the subscales EC and PD, and the total EL. A discriminant analysis of the Phases of Re-socialization found differences in PT, EC, PD, and EL. Thus, the IRI was able to find differences in empathy levels based on phase level. FS was unable to discriminate between phase levels (see Table 18). Thus, differences were not found for the empathy component FS for adjudicated youth in this study based on their phase in the re-socialization program. Investigating the analysis found that PT differentiated between youth at the phase two level. EC discriminated between youth at phase two, three, and parole. Differences between youth at the phase two, three, and parole level from this study were found by the EC component. PD found differences among youth at the phase four level. The total EL discriminated between youth at phases two, three, four, and parole. Thus, empathy levels for youth at phase two, three, four, and parole were significantly different.

Table 18

Significance and Differences for Phase

Factors	Wilks' Lambda	F	df1	df2	Sig.
Perspective Taking (PT)	.871	3.173	4	86	.018*
Fantasy (FS)	.927	1.700	4	86	.157
Empathic Concern (EC)	.792	5.633	4	86	.000*
Personal Distress (PD)	.890	2.644	4	86	.039*
Empathy Level (EL)	.762	6.702	4	86	.000*

Note. * represents significance at <.05.

Summary of Findings

A summary of findings from the study answer the six research questions:

Research Question #1

What differences exist in the empathy level scores obtained from the IRI of adjudicated youth in the four different correctional facilities?

Discriminant analysis calculated a significant difference among incarcerating facilities. Further investigation found that only facility three was discriminated by the IRI in every empathy component and total EL score. Facilities one, two, and four were not found to vary significantly.

Adjudicated youth in the study typically scored lower than average on the IRI. Consistent with research on juvenile delinquents (e.g., Aleksic, 1975; Cohen & Strayer, 1996; Ellis, 1982; Gibbs, 1987; Marcus & Gray, 1998), subjects in this study demonstrated low levels of empathy.

Research Question #2

What differences exist in the empathy level scores obtained from the Interpersonal Reactivity Index (IRI) for adjudicated youth ages 14, 15, 16, and 17?

No significant differences were found to discriminate between age factors based on the four components of the IRI and the total empathy level score. Thus the IRI was unable to find significant differences in the empathy levels of adjudicated youth in this study based on age.

Research Question #3

What differences exist in the empathy level scores obtained from the IRI for adjudicated youth with IQs of 55-70, 71-85, 86-100, 101-115, 116 and above?

Significant differences exist for discriminating IQ levels with the IRI. However, only FS was found to be the discriminating component for subjects with IQs ranging from 71 to 85 and 101 to 115. Differences were found between youth with IQs of 71-85 and 101-115 for the FS component of the IRI. Differences of empathy levels on the IRI were not found for youth with IQs of 55-70, 86-100, and 116.

Research Question #4

What differences exist in the empathy level scores obtained from the IRI for adjudicated youth with a committing offense of aggravated assault, aggravated robbery, arson, burglary, capital murder, manslaughter, sexual assault, or substance offense (e.g., using, buying, selling)?

The IRI was able to discriminate between youth incarcerated for aggravated robbery with the FS component. Subjects in correctional facilities for committing aggravated

robbery and sexual assault were discriminated by EC. The total IRI EL score discriminated between youth incarcerated for aggravated robbery and youth incarcerated for sexual assault. Empathy levels were found to be different for youth committed for aggravated robbery and youth committed for sexual assault. No differences were found by the IRI for the empathy levels of youth in this study incarcerated for aggravated assault, arson, burglary, and substance offense.

Of the 535 subjects administered the IRI by TYC personnel and found eligible for the study, none were incarcerated for manslaughter or capital murder. As a result, these two variables were omitted from the study.

Research Question #5

What differences exist in the empathy level scores obtained from the IRI for adjudicated youth with emotional/behavioral disorders (E/BD) or learning disabilities (LD)?

Significant differences were found for disability status. However, youth without disabilities were discriminated with the highest frequency by the IRI. The test was able to find differences in empathy levels for youth with ND in this study. Subjects without disabilities and subjects with LD were differentiated by EC. The PD component of the IRI discriminated between all factors of youth without disabilities, youth with E/BD, and youth with LD. Thus, the IRI found differences in the PD for all youth in the disability status group. The total EL score differentiated between subjects without disabilities and those with LD. Empathy levels were found to be significantly different for subjects with ND and subjects with LD. The IRI did not find differences for total EL for subjects with E/BD.

Research Question #6

What differences exist in the empathy level scores obtained from the IRI in the Texas Youth Commission's Phases of Re-socialization training program for adjudicated youth at phase one, phase two, phase three, phase four, and parole phase?

The IRI found differences among youth at various phase levels in the re-socialization program. Specifically, PT discriminated between phase two and three, while EC found significant differences among phase two, three, and parole. Youth at the phase two level were discriminated by PD. Finally, EL differentiated between youth at phases two, three, four, and parole. The IRI found differences between the empathy levels of youth used in this study by phase.

Personal Reflections

After analyzing the results of the data, the inconsistencies of the findings were prominent. Reflecting on the results led to further questions about the study. Many variables were uncontrollable by the researcher. Questions about the administration of the IRI were of concern. The researcher was not aware of who administered the test, how it was administered, and at what point of the youth's entry to a facility that the IRI was administered. These factors can impact the scores on the test. Group or individual test administration may affect scores.

Concern over the IRI test also led to questions about the IQ tests. Again, who administered the test, when it was administered, and which IQ tests were used are unanswered questions in this study. Typically, IQ information was provided to TYC from school records. IQs of youth in the study may have fluctuated over time, influenced by

who administered the test, and affected by the type of IQ test given.

Other variables unknown to the investigator were previous experiences of the youth. Prior offenses and incarcerations may have effected the study results. Youth formerly committed to incarcerating facilities may have had the advantage of previous training in re-socialization. Knowledge about family and home life may have also impacted the results of the study. Youth from more nurturing homes with family support may have experienced different empathy levels than youth disconnected with their family and community. Information about past experiences may have provided answers to inconsistent findings in the study.

Discrepant data found on IRI scores of youth from facility three and youth with IQs of 70-85 were of concern. First, facility three exhibited much lower scores on the IRI when compared to the other correctional facilities. This raises issues of test administration, types of youth incarcerated at the different facilities, and rehabilitation programs provided at the facilities.

Next, the relatively high scores on the IRI for youth with IQs ranging from 70-85 is perplexing. Research has indicated that the IQ of an adjudicated youth is related to moral reasoning (Arbuthnot & Gordon, 1988), with individuals with higher IQs showing increased levels of moral development. Yet, the study found youth with the highest IQs of 116+ exhibiting the lowest empathy level. Youth with the lowest IQs demonstrated the highest empathy levels. The small number of youth in each IQ range may provide answers to the inconsistency in the data. Furthermore, information on how the test was administered to the youth with IQs of 70-85 is needed. Vocabulary used in the IRI may

be difficult for youth to understand. Knowledge about whether the test was administered orally and explained to these youth is unknown.

Information on IRI test administration, IQ tests, and previous experiences of the youth may have improved the outcomes of this study. Inconsistencies in the scores from the IRI for the incarcerating facilities and IQ ranges may reflect the unknown variables influencing the study. These were uncontrollable variables that potentially impacted the interpretation of the data.

CHAPTER V

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Summary

As juvenile delinquency rises in our nation, the need for prevention and rehabilitation is crucial. Exact causes are unknown because of the numerous contributing factors. Research has indicated a link between delinquency and empathic deficits (e.g., Daberman, 1999; Ellis, 1982; Gibbs, 1987; Lee & Prentice, 1988); however, studies examining the relationship between empathy and age, intelligence, type of offense, and disabilities are limited. Research addressing these factors is needed to determine the impact of empathy levels on adjudicated youth. Information is required for developing effective programs for helping delinquent youth and their families.

The purpose of this study was to examine the empathy levels of youth placed at four correctional facilities. The study attempted to determine if empathy levels among adjudicated youth can be differentiated by (a) age, (b) intelligence quotient (IQ), (c) type of offense, and (d) disability status. This study also investigated the impact of an empathy component in a re-socialization program used at four juvenile correctional facilities. The Texas Youth Commission (TYC) provided demographic information on age, IQ, type of offense, disability, re-socialization phase, and incarcerating facility for the subjects in the study.

A random sample of 170 subjects from a pool of 535 adjudicated youth was used in the study. Youth were randomly selected, but the number of youth representing the different factors (e.g., incarcerating facility, age, IQ, disability status, phase) were often

unequal. Numbers of youth at each facility varied, as did their age, IQ, type of offense, and disability. The Interpersonal Reactivity Index (IRI) was administered to youth incarcerated at four correctional facilities in Texas. The IRI uses an integrative empathy approach to address affective and cognitive constructs of empathy. Four components of the 28-item test measure empathy. Perspective Taking (PT), assesses the ability to understand the point of view of another. Fantasy (FS) examines the ability to identify with the feelings of fictitious characters; while Empathic Concern (EC) measures sympathy and concern for others in negative situations. Finally, Personal Distress (PD) assesses personal feelings of anxiety and distress in tense situations. A total score for the IRI is calculated by adding the four components to obtain an Empathy Level (EL).

Interpreting the results of the study should be done with caution. Studies are only generalizable to the degree in which the sample accurately represents the population being examined. To this regard, subjects in this research study may differ from populations in other geographical regions. Additionally, if generalizing to other populations, different definitions of disabilities, different tests used to obtain IQ scores and empathy levels, and different incarcerating facilities may be considered. Finally, a paper and pencil measure of empathy used by the IRI may not elicit empathic emotions and comprehension typically experienced in real life dilemmas.

Although many of the findings are inconsistent, research demonstrates that adolescence is a time of instability and heightened emotions (Gibbs, 1987; Rice, 1992). Thus, emotions at the time youth were administered the IRI may be different than typical

emotional state of the youth. Fear of being incarcerated and away from family and friends may impact scores on the IRI. Careful interpretation of the data is suggested.

Discriminant analysis calculated a significant difference among incarcerating facilities. Further investigation found that only facility three was discriminated by the IRI in every empathy component and total EL score. Subjects used in the study from facilities one, two, and four were not found to vary significantly. Data indicates all subjects in the four facilities are low in PT and EC, but only facilities three and four are below average in FS. All facilities, except facility three, scored higher than average on PD. EL was found to be close to average for facility one (59), facility two (58), and facility four (57). Facility three exhibited a much lower EL with a score of 31.

The study determined that significant differences were not found among age on the IRI. However, youth ages 14, 15, 16, and 17 years scored lower than the IRI average scores on PT, FS, and PD. Only 17-year-olds scored lower than the normed score on EC. An average total EL for the IRI is 61; 17-year-old subjects scored the lowest on EL. Fourteen and fifteen-year-old subjects scored lower than the average. Fifteen-year-old subjects scored close to the average with a 59.

Although differences do exist for discriminating IQ levels with the IRI, only FS was able to differentiate between IQ ranges of 71-85 and 101 to 115. Average scores on the PT and EC were lower than the normed score for all IQ groups. However, youth with IQs between 101 and 115 scored a 16, the average score for FS. All other IQ groups scored lower than average on FS. Subjects with IQs ranging from 55-70, 71-85, and 86-100 scored higher than the average on PD. Youth with IQs of 101-115 and 116 and above

maintained an average score. Overall EL was much lower than the average, particularly for those with IQs of 116 or above. Youth with the highest IQs scored a 41 on EL compared to a normed score of 61.

The IRI was able to discriminate between type of offenses. Youth incarcerated for aggravated robbery were discriminated by the FS component. Subjects committed to the correctional facilities for committing aggravated robbery and sexual assault were discriminated by EC. The EL score discriminated between youth incarcerated for aggravated robbery and youth incarcerated for sexual assault. All types of offenses scored lower than average on PT and EC. Youth incarcerated for arson and sexual assault exhibited the highest scores on FS meeting the norm of 16. All other subjects scored lower than the average on FS. All types of offense groups scored higher on PD, except the aggravated robbery group. A score of eight was obtained for youth committed for aggravated robbery, while the average score is a nine. Total EL scores were lower than the average for all groups except those incarcerated for arson, scoring a 60 compared to 61. Aggravated robbery had the lowest EL with a 38, followed by substance offense (47), aggravated assault (52), burglary (54), and sexual assault (58). Of the 535 subjects administered the IRI by TYC and found eligible for the study, none were incarcerated for manslaughter or capital murder. As a result, these two variables were omitted from the study.

Significant differences were found for the disability status in the study. However, youth without disabilities were discriminated with the highest frequency by the IRI. Subjects without disabilities and subjects with LD were differentiated by EC. The PD

component of the IRI discriminated between all factors of youth without disabilities, youth with E/BD, and youth with LD. The total EL score differentiated between subjects without disabilities and those with LD. Scores on the PT and FS component for all of the groups were average. However, EC was lower than average (19) for youth with E/BD (14), with LD (16), and youth without disabilities (11). PD was lower than average for subjects without disabilities, and higher than average for subjects with E/BD and LD. All groups scored lower than average on EL, with youth without disabilities experiencing the lowest score.

Phases of Re-socialization was discriminated by the IRI. Analysis of the data revealed that the PT component discriminated between phase two and three, while EC found significant differences among phase two, three, and parole. Youth at the phase two level were discriminated by PD. EL differentiated between youth at phase two, three, four, and parole. Youth at the higher phases exhibited increased levels of empathy. Total EL was above average for youth at phases three, four, and parole. Phase two empathy levels were the lowest, indicating a drop in empathy levels once incarcerated. However, data demonstrates a dramatic increase in empathy once at the parole phase.

Implications

Findings in this study demonstrate that adjudicated youth typically experience lower levels of empathy. When compared to each other by incarcerating facility, age, IQ, type of offense, disability status, and phase of re-socialization discriminant analysis finds that many of the youth can be discriminated. However, many of the findings are inconsistent.

Differences in the facility empathy scores may be a result of different testing

procedures and/or types of youth incarcerated at the facility. Assessing empathy levels to determine amount of focus on teaching empathy may provide positive results.

This study found that the FS component of the IRI discriminated between youth with IQs of 71-85 and youth with IQs of 101-115. FS measures a respondent's ability to identify with the feelings and emotions of fictitious characters in books, movies, and television programs. Therefore, programming could be directed to teaching empathy through bibliotherapy and media-related forms to these two IQ groups. Additionally, FS was found to be correlated with verbal intelligence (Davis, 1983), thus possibly explaining why the 101-115 IQ group was discriminated.

Youth committing aggravated robbery and sexual assault were differentiated by the IRI. Specialized programs for anger reduction and emotional understanding may help these youth and impede further delinquency. Empathy training could provide insight into the impact crimes have on their victims.

The IRI found that youth without disabilities have the lowest empathy levels. Perhaps because special education offers services addressing emotions, youth with E/BD and LD appeared to be learning appropriate empathic responses. It is important to consider that youth in correctional facilities are often underidentified as having a disability (Nelson et al., 1987).

Phases of Re-socialization, a program for rehabilitating incarcerated youth, may be successfully impacting juvenile delinquents. Data indicate a dramatic rise in empathy levels as the subjects progress to phase three and above. Understanding the impact that the empathy component of the program has on youth may help other facilities ameliorate

rehabilitation and intervention programs. Secondly, aspects of the training program may assist practitioners working with youth at-risk for delinquent behaviors.

Finally, aggregated scores on the factors of incarcerating facility, IQ, type of offense, disability status, and phase scored higher than average on PD. The age group obtained an average score on PD. The empathy component PD is the measure of personal anxiety and distress in tense situations. High PD scores are correlated with low social functioning. Davis (1983) postulated that individuals with high PD scores feel anxious in social situations, and therefore have difficulty establishing and maintaining relationships. Addressing personal anxiety exhibited by adjudicated youth through individual and group therapy may positively impact their ability to cope in tense situations.

This study demonstrates that adjudicated youth exhibit low empathy levels. The IRI was able to discriminate between factors of incarcerating facility, IQ, type of offense, disability status, and phase in re-socialization training. Family, practitioners, and policy-makers may use the information for encouraging the development of effective programming for youth exhibiting low empathy levels. Programming for the youth addressing their committing offense may be beneficial. Offering individual support reflecting IQ and disability needs may increase the success of the youth.

Recommendations

Findings from this study demonstrate a need to further investigate the impact of empathy levels of adjudicated youth based on factors of age, IQ, type of offense, and disability status. Exploring the effects of re-socialization and rehabilitation programs addressing empathy in juvenile correctional facilities is warranted. Because many

programs exist without accountability and empirical evidence supporting positive results, assessing programs is essential. Data on the Phases of Re-socialization appear promising; however, longitudinal studies are needed to determine if increased empathy levels remain stable after release from the correctional facilities. Addressing the programs and types of youth incarcerated at different facilities could provide information on developing training specific to facility needs. Additionally, general education could provide programs addressing empathy and emotional health to effectively address youth without disabilities experiencing empathic deficits.

Longitudinal studies addressing the factors related to adjudicated youth and empathy would be valuable. Investigations specifically targeting one factor related to empathy and adjudicated youth may provide an increased understanding, and perhaps more consistent findings. Furthermore, examining the impact of empathy levels on adjudicated female youth is imperative. Females exhibit different empathy levels than males (Davis, 1983), thus, studies investigating how empathy impacts females in juvenile correctional facilities may offer beneficial suggests.

APPENDIX A

LETTER OF CONSENT FROM THE TEXAS YOUTH COMMISSION

STEVE ROBINSON
Executive Director

DWIGHT HARRIS
Deputy Executive Director

COMMISSION MEMBERS

LEONARD E. LAWRENCE, M.D.
Chairman
San Antonio

EDNA TAMAYO
Vice-Chair
Harlingen

PETE C. ALFARO
Baytown

CHARLES HENRY
Pampa

JOHN W. ODAM
Spring

LISA SAEMANN TESCHNER
Dallas

APPENDIX A

TEXAS YOUTH COMMISSION

4900 North Lamar
P.O. Box 4260 • Austin, Texas 78765
(512) 424-6000 (Voice)
(512) 424-6089 (Fax)
1-800-RELAY-TX (TDD)

May 15, 2000


Reata Busby
Chair, Institutional Review Board
Director of Research Services
P.O. Box 305250
University of North Texas
Denton, Texas 76203

Dear Ms. Busby:

The Texas Youth Commission (TYC) is reviewing the following research proposal by Ellen Wildemann-Broom: An Examination of Factors Related to the Cognitive and Affective Empathy Levels of Adjudicated Youth. The Research Department feels that the results of Ellen's research can aid decision making regarding youth treatment programs at TYC.

Per TYC policy, I am recommending the proposal for agency approval and have forwarded Ellen's proposal to Dr. Linda Reyes, Assistant Deputy Director for Rehabilitation Services. Following Dr. Reyes' approval and notification from Ellen of your Institutional Review Board approval, TYC can give final approval. If you need additional information, feel free to call me at 512-424-6251.

Sincerely,



Chuck Jeffords, Ph.D.
Research Director

APPENDIX B

LETTER OF CONSENT FOR THE INSTITUTIONAL REVIEW BOARD

UNIVERSITY^{of} NORTH TEXAS

Office of Research Services

June 20, 2000

APPENDIX B

Ellen Wildemann-Broom
1478 Sycamore Dr.
Keller, TX 76248

RE: Human Subjects Application No. 00-098

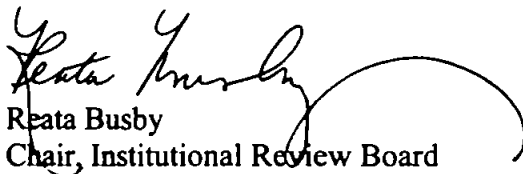
Dear Ms. Wildemann-Broom,

On May 31, 2000, the University of North Texas Institutional Review Board conducted a full review of your proposed project titled "An Examination of Factors Related to Affective and Cognitive Empathy Levels of Adjudicated Youth." The University of North Texas IRB feels the risks inherent in this research are minimal and the potential benefits to the subjects outweigh those risks. The submitted protocol is hereby approved for the use of human subjects on this project.

U.S. Department of Health and Human Services regulations require that you submit annual and terminal progress reports to the UNT Institutional Review Board. Further, the UNT IRB must re-review this project annually and/or prior to any modifications you make in the approved project. **Federal policy 21 CFR 56.109(e) stipulates that IRB approval is for one year only.**

Please contact me if you wish to make changes or need additional information.

Sincerely,



Reata Busby
Chair, Institutional Review Board

RB:sb

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